



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR          | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|-------------------------------|---------------------|------------------|
| 09/846,456      | 05/02/2001  | Marie-Francoise Rosier-Montus | 3806.0505           | 1457             |

5487 7590 04/05/2006  
ROSS J. OEHLER  
AVENTIS PHARMACEUTICALS INC.  
1041 ROUTE 202-206  
MAIL CODE: D303A  
BRIDGEWATER, NJ 08807

EXAMINER

SULLIVAN, DANIEL M

ART UNIT PAPER NUMBER

1636

DATE MAILED: 04/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/846,456

Applicant(s)

ROSIER-MONTUS ET AL.

Examiner

Daniel M. Sullivan

Art Unit

1636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3,5-14,23,33-38,57 and 58 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,35,36 and 58 is/are allowed.
- 6) ☒ Claim(s) 2,3,5-14,23,33,34,37 and 38 is/are rejected.
- 7) ☒ Claim(s) 57 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☒ Other: Sequence alignments.

### **DETAILED ACTION**

This Office Action is a reply to the Paper filed 17 January 2006 in response to the Final Office Action mailed 17 May 2005. Claims 1-3 and 5-38 were considered in the 17 May Office Action. Claims 15-22 and 24-32 were canceled, claims 1-3, 5, 6 and 23 were amended, and claims 57-58 were added in the 17 January Paper.

#### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 17 January 2006 has been entered.

Presently, claims 1-3, 5-14, 23, 33-38, 57 and 58 are pending and under consideration.

#### ***Response to Amendment***

Rejection of claims 15-22 and 24-32 is rendered moot by the cancellation thereof.

#### **Claim Rejections - 35 USC § 112**

Rejection of claim 23 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement for the reasons set forth in the 17 May Office Action is withdrawn in view of the fact that the claim does not require that the nucleic acid exhibit transcriptional regulatory activity.

Rejection of claims 1-3, 5-14, 23, 33-38, 57 and 58 under 35 U.S.C. 112, second paragraph, as being indefinite is withdrawn in view of the amendments to the claims.

### *New Grounds*

#### Claim Objections

Claim 57 is objected to because of the following informalities: The claim is objected to because the phrase “a polynucleotide which has having at least...” is grammatically incorrect. Appropriate correction is required.

#### Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 37 and 38 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The discussion of “Recombinant host cells” in the specification commencing at page 4 does not provide a limiting definition of a host cell within the scope of the claims. In addition, the specification commencing on page 59 contemplates *in vivo* gene transfer of the nucleic acids of the invention and contemplates at page 74, line 10, *in vivo* gene transfer into human cells. Given that there is no limiting definition of a host cell and the application contemplates the production of recombinant host cells in humans *in vivo*, the host cell of the claims can reasonably be construed as encompassing a cell present or intended to be present in a human being, said cell becoming integrated into the human being and therefore being an

Art Unit: 1636

inseparable part of the human itself. The scope of the claim, therefore, encompasses a human being, which is non-statutory subject matter. As such, the recitation of the limitation “non-human” or “isolated host cell” would be remedial. See 1077 O.G. 24, April 21, 1987.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 7-12, 33 and 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 7-12 are indefinite in reciting, “said isolated nucleic acid is a polynucleotide comprising a sequence ranging from the nucleotide at position –1 to the nucleotide at position –200 [*etc.*], with respect to the first nucleotide transcribed, which is located at position 2894 of the nucleotide sequence of SEQ ID NO: 1.” First, there is no antecedent basis for “the nucleotide at position –1” or “the nucleotide at position –200 [*etc.*]” or a “first nucleotide transcribed” in the claims from which claims 7-12 depend. Although claim 6 recites, “said nucleic acid modifies the transcription of a polynucleotide placed under its control” the claim does not require that the nucleic acid actually comprise a polynucleotide placed under its control. Rather, claim 6 is reasonably construed as reciting a functional property of the claimed nucleic acid, but does not require that the claimed nucleic acid actually comprise an expression cassette. Therefore, there is no –1 position or “first nucleotide transcribed” inherent to the claims from which claims 7-12 depend. Furthermore, even if the prior claims were directed to an expression cassette comprising

Art Unit: 1636

“a sequence ranging from...”, there is neither explicit nor implicit antecedent for a position –200, –600, –2894, –995, *etc.* in the claims.

In addition, it is unclear to what the “sequence ranging from the nucleotide at position [A] to the nucleotide at position [B]” is referring. Although the claim recites that the numbering is with respect to the first nucleotide transcribed, which is identified as being located at position 2894 of the nucleotide sequence of SEQ ID NO: 1, the claims do not appear to be limited to comprising the sequence of SEQ ID NO: 1. Claims 3 and 5, from which claim 6 and subsequent claims depend, are clearly not limited to comprising SEQ ID NO: 1. In view of this, it is unclear what sequence is comprised within the range recited in the claims, other than the sequence of claims 3 and 5, which can be as short as 20 or 35 nucleotides, respectively. Furthermore, as the claims are not limited to comprising SEQ ID NO: 1, it is unclear how the identification of position 2894 of SEQ ID NO: 1 as “the first nucleotide transcribed” limits the claim. In the absence of a limitation that the claim comprise SEQ ID NO: 1 or some significant portion of SEQ ID NO: 1 that includes the transcriptional start site, it is unclear how position 2894 of SEQ ID NO: 1 is related to the nucleic acid being claimed. This is because the transcriptional start site in SEQ ID NO: 1 is defined by the regulatory elements lying upstream of SEQ ID NO: 1, which are not necessarily comprised by the claimed nucleic acid unless it is Applicant’s intention that the identification of the first nucleotide transcribed as located at position 2894 of the nucleotide sequence SEQ ID NO: 1 limit the claimed nucleic acid to comprising the regulatory elements of SEQ ID NO: 1 configured so as to provide a first nucleotide transcribed at a position corresponding to position 2894 of SEQ ID NO: 1.

Art Unit: 1636

Given that the terms in the claims lack antecedent basis, the claims do not clearly indicate what sequence is comprised within the range recited in the claim and it is unclear how the recitation of the first nucleotide transcribed to being located at position 2894 of SEQ ID NO: 1 limits the claims, the metes and bounds of the claimed subject matter as a whole are unclear.

Claim 33 is indefinite in reciting that the polynucleotide encodes one compound chosen from “polypeptides of interest and nucleic acids of interest”. It is unclear whether the use of the plural requires that the nucleic acid encode more than one polypeptide or nucleic acid. If this were the case, then the requirement for multiple polypeptides or nucleic acids would seem inconsistent with the phrase “at least one”. If it is Applicant’s intention that the claims cover the nucleic acid encoding at least one polypeptide or at least one nucleic acid, it would be remedial to amend the claims to recite the singular “polypeptide” and “nucleic acid”, which are construed as encompassing one or more.

Claim 34 is indefinite insofar as it depends from claim 33.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 2, 3, 5-14 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Langmann et al. (Biochemical and biophysical Research Communication, 2/9/1999, Vol. 257:29-33; see the entire document).

As stated in the 19 November 2002 Office Action, Langmann et al teach the purification and characterization of a full-length cDNA (~6.8 kb) for the human ABC1 transporter that was given the accession number AJ012376 (e.g. Abstract; page 30, 1<sup>st</sup> paragraph Results and Discussion). The attached NCBI readout for AJ012376 indicates that the full-length cDNA taught by Langmann et al comprises the first 120 nucleotides 5' of the coding sequence. This 5' coding sequence would necessarily "modify" the transcription of the coding sequence under its control.

This rejection was originally made in the 19 November Office Action and withdrawn when the claims were limited to comprising a polynucleotide having at least 300 nucleotides of SEQ ID NO: 1 (see Applicant's remarks filed 21 April 2003, first full paragraph on page 11). In the 17 January Paper, Applicant has amended the claims such that they are no longer limited to comprising 500 or more consecutive nucleotides of SEQ ID NO: 1. Therefore, the claimed subject matter again embraces the nucleic acid of Langmann *et al.* and the claims are properly rejected under 35 USC §102(b) as anticipated by Langmann *et al.*

Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by Auffray et al (C. R. Acad. Sci. III, Sci. Vie 318, No. 2, pages 263-272; see the search reports attached to the 19 November Office Action action).

As stated in the 19 November Office Action, as indicated by the attached search reports, Auffray et al teach the sequence the sequence of a cDNA clone obtained from the infant brain. The sequence taught by Auffray et al comprises greater than 20 contiguous nucleotides of SEQ ID NO: 2.

This rejection was originally made in the 19 November Office Action and maintained in the Office Action mailed 12 November 2003 on the grounds that the phrase "...comprising a polynucleotide of the sequence SEQ ID NO: 2..." can be read broadly to specify any sequence found within SEQ ID NO: 2 (see page 3 of the 12 November Office Action). The rejection was subsequently withdrawn when the claims were amended to recite, "...a polynucleotide of the entire nucleotide sequence..." However, the 17 January Paper amends the claims such that this phrase is no longer recited in claim 2 and the claim again embraces the nucleic acid of Auffray *et al*. Therefore, the claims are properly rejected under 35 USC §102(b) as anticipated by Auffray *et al*.

Claims 2, 3, 6-14 and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Tall U.S. Patent No. 6,773,893 B1.

Claim 1 of Tall is directed to an isolated ABC1 promoter that directs transcription of a heterologous coding sequence positioned downstream therefrom, wherein the promoter comprises nucleotides having the nucleotide sequence beginning at bp 624 and ending at bp 1197 of SEQ ID NO: 1 or beginning at bp 1005 and ending at bp 1059 of SEQ ID NO: 1. As evidenced by the sequence alignments mailed herewith (us-09-846-456a-1.rni, RESULT 3 and us-09-846-456a-3.rni, RESULT 3), the claimed nucleic acids of Tall anticipate the nucleic acid

Art Unit: 1636

comprising a nucleotide sequence of SEQ ID NO: 2 and comprising at least 20 consecutive nucleotides of SEQ ID NO: 3 according to claims 2 and 3. Furthermore, claim 1 of Tall recites that the nucleic acid directs transcription according to the instant claims 6-12 and comprises various regulatory elements identified in the instant application as having positive or negative regulatory activity according to claims 13 and 14 (see especially Figure 2 and Table 1 of the instant application, which identifies several regulatory elements, and the sequence alignment us-09-846-456a-3.rni, page 4, which shows where the identified elements appear in the sequence of Tall). Finally, given the close structural similarity of the nucleic acid claimed by Tall to the instant SEQ ID NO: 1, one would expect, absent evidence to the contrary, that the nucleic acid of Tall would hybridize to a nucleic acid having 500 or more consecutive nucleotides of the sequence complementary to SEQ ID NO: 1.

The nucleic acid of Tall is the same as the nucleic acid of the instant claims. Therefore, the claims are properly rejected under 35 USC §102(e) as anticipated by Tall.

Claims 2, 5, 6-13 and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Hayden *et al.* U.S. Patent No. 6,617,122 B1.

Hayden *et al.* teaches a nucleic acid comprising the ABC1 promoter, which nucleic acid comprises SEQ ID NO: 14 (see especially Figure 12 and the brief description thereof at column 12, lines 19-21). As evidenced by the sequence alignments mailed herewith (us-09-846-456a-2.rni, RESULT 1 and us-09-846-456a-5.rni, RESULT 9), the nucleic acid of Hayden *et al.* anticipates the nucleic acid comprising a nucleotide sequence of SEQ ID NO: 2 and comprising at least 35 consecutive nucleotides of SEQ ID NO: 5 according to claims 2 and 5. Furthermore,

Art Unit: 1636

Hayden *et al.* teaches that the nucleic acid is a promoter according to the instant claims 6-13.

Finally, given the close structural similarity of the nucleic acid of Hayden *et al.* to nucleic acids comprised within the instant SEQ ID NO: 1, one would expect, absent evidence to the contrary, that the nucleic acid of Hayden *et al.* would hybridize to a nucleic acid having 500 or more consecutive nucleotides of the sequence complementary to SEQ ID NO: 1 according to the instant claim 23.

The nucleic acids of Hayden *et al.* are the same as the nucleic acid of the instant claims. Therefore, the claims are properly rejected under 35 USC §102(e) as anticipated by Hayden *et al.*

#### ***Allowable Subject Matter***

Claims 1, 35, 36 and 58 are allowed.

Claim 57 is objected to.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel M Sullivan whose telephone number is 571-272-0779. The examiner can normally be reached on Monday through Friday 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Remy Yucel, Ph.D. can be reached on 571-272-0781. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) (<http://pair-direct.uspto.gov>) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to

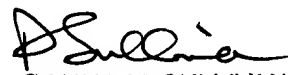
Art Unit: 1636

midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days.

Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

Daniel M. Sullivan, Ph.D.  
Primary Examiner  
Art Unit 1636



**DANIEL M. SULLIVAN**  
**PATENT EXAMINER**

| Result No. | Score | Query Match | Length | PB | ID                   | Description        |
|------------|-------|-------------|--------|----|----------------------|--------------------|
| 1          | 340.2 | 95.3        | 10545  | 3  | US-09-526-193A-14    | Sequence 14, Appl  |
| 2          | 203.8 | 57.1        | 1062   | 3  | US-10-000-489-101    | Sequence 101, App  |
| 3          | 203.4 | 57.0        | 1047   | 3  | US-09-621-976-13889  | Sequence 13889, A  |
| 4          | 159.4 | 44.6        | 10442  | 3  | US-09-596-141C-1     | Sequence 1, Appl   |
| 5          | 159.4 | 44.6        | 10442  | 3  | US-09-595-526C-1     | Sequence 1, Appl   |
| 6          | 159.4 | 44.6        | 10474  | 3  | US-09-596-141C-7     | Sequence 7, Appl   |
| 7          | 159.4 | 44.6        | 10474  | 3  | US-09-596-141C-9     | Sequence 9, Appl   |
| 8          | 159.4 | 44.6        | 10474  | 3  | US-09-595-526C-7     | Sequence 7, Appl   |
| 9          | 159.4 | 44.6        | 10474  | 3  | US-09-595-526C-9     | Sequence 9, Appl   |
| 10         | 135.8 | 38.0        | 7860   | 3  | US-09-526-193A-2     | Sequence 2, Appl   |
| 11         | 37.8  | 10.6        | 8920   | 3  | US-09-949-016-15645  | Sequence 15145, A  |
| 12         | 37.8  | 10.6        | 30678  | 3  | US-09-949-016-17818  | Sequence 17818, A  |
| 13         | 36.4  | 10.2        | 154600 | 3  | US-09-949-016-14757  | Sequence 14757, A  |
| 14         | 35.8  | 10.0        | 858    | 3  | US-09-540-236-1287   | Sequence 1287, Ap  |
| 15         | 35.8  | 10.0        | 92407  | 3  | US-09-596-007-36     | Sequence 36, Appl  |
| 16         | 35.8  | 10.0        | 234884 | 3  | US-09-949-076-15640  | Sequence 15640, A  |
| 17         | 35.2  | 9.9         | 601    | 3  | US-09-949-076-21645  | Sequence 21645, A  |
| 18         | 35.2  | 9.9         | 601    | 3  | US-09-949-016-156630 | Sequence 156690, A |
| 19         | 35.2  | 9.9         | 231129 | 3  | US-09-949-016-16110  | Sequence 16110, A  |
| 20         | 35.2  | 9.9         | 266293 | 3  | US-09-949-016-11934  | Sequence 11934, A  |
| 21         | 35    | 9.8         | 298    | 3  | US-09-526-999C-10257 | Sequence 10257, A  |
| 22         | 34.4  | 9.6         | 6588   | 3  | US-09-949-016-1076   | Sequence 1076, Ap  |
| 23         | 33.4  | 9.4         | 4438   | 3  | US-09-949-016-13578  | Sequence 13578, A  |
| 24         | 32.8  | 9.2         | 137753 | 3  | US-09-949-016-17404  | Sequence 17404, A  |

| Query Match-<br>Best Local Similarity<br>Matches 353; | 95.3%;<br>98.9%;<br>Conservative 0; | Score 340.2;  | DB 3; | Length 10545; | DB 3; | Length 10545; |
|---|-------------------------------------|---|-------|---------------|-------|---------------|
| QY  | 1                                   | TCGAGGCTCAGCTGAGAGGGCTGGATTAGCAGTCTCATTTGGTGTATGCGTTTGAGCA      | 60    |               |       |               |
| DB  | 8043                                | TCGAGGCTCTCAGCTGAGAGGGCTGGATTAGCAGTCTCATTTGGTGTATGCGTTTGAGCA    | 8102  |               |       |               |
| QY  | 61                                  | ATAACTGATGGCTGTTTCCCTTCCTTCCTTATCTTTACGACCGACCGGGCGT            | 120   |               |       |               |
| DB  | 8103                                | ATAACTGATGGCTGTTTCCCTTCCTTCCTTATCTTTACGATTAATGACCGACCGAC -GGCGT | 8161  |               |       |               |
| QY  | 121                                 | CCCTGCTGTACGCTTGCGCGCTGCGCTTCCAGGGCTCCCGAGCCACACGCTGGGCGTGCT    | 180   |               |       |               |

|    | Query Match           | 57.1%;   | Score 203.8;     | DB 3;          | Length 1062;      |
|----|-----------------------|--|------------------|----------------|-------------------|
|    | Best Local Similarity | 84.8%;   | Prod. No. 46-55; |                |                   |
|    | Matches 240;          | Conservative   | 0;               | Mismatches 42; | Indels 1; Gaps 1; |
| Qy | 39                    | ATTGGTGATGSCITTTGCAGCAATAACGTGATGCTTTCCTCTCGCTTTATCTTTCA   | 98               |                |                   |
| Db | 1                     | ATTGGTGATGSCITTTGCAGCAATAACGTGATGCTTTCCTCTCGCTTTATCTTTCA   | 60               |                |                   |
| Qy | 99                    | GTTAATGACCAACCAACGGGCTCCCTGCTGTGTAGCTCTGGCGGTGCTTCAGGGCTCC | 158              |                |                   |
| Db | 61                    | GTTAATGACCAACCAACGGGCTCCCTGCTGTGTAGCTCTGGCGGTGCTTCAGGGCTCC | 119              |                |                   |
| Qy | 159                   | CGAGCCACACCGTGGGCGTGTGGCTGAGAGGAAATGCGATGTTGGCTTCAGCTAGGTT | 218              |                |                   |
| Db | 120                   | CGAGCCACACCGTGGGCGTGTGGCTGAGAGGAAATGCGATGTTGGCTTCAGCTAGGTT | 179              |                |                   |

RESULT 4  
US-09-596-141C-1  
Sequence 1, Application US/09596141C  
Patent No. 6821774  
GENERAL INFORMATION:  
APPLICANT: Lawn, Richard M.  
APPLICANT: Wade, David  
APPLICANT: Ozam, John R.  
APPLICANT: Garvin, Michael  
TITLE OF INVENTION: Compositions and Methods for Increasing Cholesterol  
TITLE OF INVENTION: Efflux and Raising HDL using ATP Binding Cassette  
TITLE OF INVENTION: Transporter Protein ABC1  
FILE REFERENCE: 99,395-B  
CURRENT APPLICATION NUMBER: US/09/596,141C  
CURRENT FILING DATE: 2000-06-16  
PRIOR APPLICATION NUMBER: US 60/140,264  
PRIOR FILING DATE: 1999-06-18  
PRIOR APPLICATION NUMBER: US 60/153,872  
PRIOR FILING DATE: 1999-09-14

```
FILE REFERENCE: 91.US6.DIV
CURRENT APPLICATION NUMBER: US/10/000,489
CURRENT FILING DATE: 2001-11-14
PRIOR APPLICATION NUMBER: US 09/924,340
PRIOR FILING DATE: 2001-08-06
PRIOR APPLICATION NUMBER: US/01/01715
PRIOR FILING DATE: 2001-06-06
PRIOR APPLICATION NUMBER: US 60/305,456
PRIOR FILING DATE: 2001-07-13
PRIOR APPLICATION NUMBER: US 60/302,277
PRIOR FILING DATE: 2001-06-29
PRIOR APPLICATION NUMBER: US 60/298,698
PRIOR FILING DATE: 2001-06-15
PRIOR APPLICATION NUMBER: US 60/293,574
PRIOR FILING DATE: 2001-05-25
NUMBER OF SEQ ID NOS: 112
SOFTWARE: JPatent
SEQ ID NO 101
LENGTH: 1062
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: 5'UTR
LOCATION: 1..153
NAME/KEY: CDS
LOCATION: 154..639
NAME/KEY: 3'UTR
LOCATION: 640..1062
NAME/KEY: polyA signal
LOCATION: 1023..1028
NAME/KEY: polyA site
LOCATION: 1047..1062
US-10/000-489-101

Query Match      89.4%; Score 142.2; DB 3; Length 1062;
Best Local Similarity 97.5%; Pred. No. 6.4e-34;
Matches 155; Conservative 0; Mismatches 3; Indels 1; Gaps 1;

1  TTAATGACCCAGCCAGCGGCTGCTCTGTCAGCTCTGGCGCTGCTTCCAGGGCTCCC 60
62  TTAATGACCCAGCCAGCGGCTGCTCTGTCAGCTCTGGCGCTGCTTCCAGGGCTCCC 120
61  GAGCCACACGCTGGGCGTGTGGCTGAGGGAACATGGCATGTTGGCTCAGCTGAGGTTG 120
121  GAGCCACACGCTGGGCGTGTGGCTGAGGGAACATGGCATGTTGGCTCAGCTGAGGTTG 180
121  CTGCTGTGGAAGAACTCCTTTTCAGAGAGACAAACA 159
181  CTGCTGTGGAAGAACTCCTTTTCAGAGAGACAAACA 219

US-09-526-193A-14
Sequence 14, Application US/09526193A
Patent No. 6617122
GENERAL INFORMATION:
APPLICANT: Hayden, Michael R.
APPLICANT: Brooks-Wilson, Angela R.
APPLICANT: Pimstone, Simon N.
TITLE OF INVENTION: METHODS AND REAGENTS FOR MODULATING
CURRENT APPLICATION NUMBER: US/09/526,193A
CURRENT FILING DATE: 2000-03-15
PRIOR APPLICATION NUMBER: 60/124,702
PRIOR FILING DATE: 1999-03-15
PRIOR APPLICATION NUMBER: 60/138,048
PRIOR FILING DATE: 1999-06-08
PRIOR APPLICATION NUMBER: 60/139,600
PRIOR FILING DATE: 1999-06-17
PRIOR APPLICATION NUMBER: 60/151,977
PRIOR FILING DATE: 1999-09-01
NUMBER OF SEQ ID NOS: 287
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 2
LENGTH: 7860
TYPE: DNA
ORGANISM: Homo sapiens
US-09-526-193A-2

Query Match      85.0%; Score 135.2; DB 3; Length 7860;
Best Local Similarity 97.9%; Pred. No. 1.6e-31;
Matches 137; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

20  GTCCCTGCTGTCAGCTTGGCGGCTGCTTCCAGGGCTCCCGAGCCACAGCTGGGCGTG 79
1  GTCCCTGCTGTCAGCTTGGCGGCTGCTTCCAGGGCTCCCGAGCCACAGCTGGGCGTG 60
80  CTGGCTGAGGGAACATGGCATGTTGGCTCAGCTGAGGTTGCTGTGGGAAGAACCTCA 139
61  CTGGCTGAGGGAACATGGCATGTTGGCTCAGCTGAGGTTGCTGTGGGAAGAACCTCA 120
140  CTTTCAGAGAGAGACAAACA 159
121  CTTTCAGAGAGAGACAAACA 140

US-10/000-489-101
Query Match      89.4%; Score 142.2; DB 3; Length 1062;
Best Local Similarity 97.5%; Pred. No. 6.4e-34;
Matches 155; Conservative 0; Mismatches 3; Indels 1; Gaps 1;

1  TTAATGACCCAGCCAGCGGCTGCTCTGTCAGCTCTGGCGCTGCTTCCAGGGCTCCC 60
62  TTAATGACCCAGCCAGCGGCTGCTCTGTCAGCTCTGGCGCTGCTTCCAGGGCTCCC 120
61  GAGCCACACGCTGGGCGTGTGGCTGAGGGAACATGGCATGTTGGCTCAGCTGAGGTTG 120
121  GAGCCACACGCTGGGCGTGTGGCTGAGGGAACATGGCATGTTGGCTCAGCTGAGGTTG 180
121  CTGCTGTGGAAGAACTCCTTTTCAGAGAGACAAACA 159
181  CTGCTGTGGAAGAACTCCTTTTCAGAGAGACAAACA 219

US-09-526-193A-14
Sequence 14, Application US/09526193A
Patent No. 6617122
GENERAL INFORMATION:
APPLICANT: Hayden, Michael R.
APPLICANT: Brooks-Wilson, Angela R.
APPLICANT: Pimstone, Simon N.
TITLE OF INVENTION: METHODS AND REAGENTS FOR MODULATING
CURRENT APPLICATION NUMBER: US/09/526,193A
CURRENT FILING DATE: 2000-03-15
PRIOR APPLICATION NUMBER: 60/124,702
PRIOR FILING DATE: 1999-03-15
PRIOR APPLICATION NUMBER: 60/138,048
PRIOR FILING DATE: 1999-06-08
PRIOR APPLICATION NUMBER: 60/139,600
PRIOR FILING DATE: 1999-06-17
PRIOR APPLICATION NUMBER: 60/151,977
PRIOR FILING DATE: 1999-09-01
NUMBER OF SEQ ID NOS: 287
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 2
LENGTH: 7860
TYPE: DNA
ORGANISM: Homo sapiens
US-09-526-193A-2

Query Match      85.0%; Score 135.2; DB 3; Length 7860;
Best Local Similarity 97.9%; Pred. No. 1.6e-31;
Matches 137; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

20  GTCCCTGCTGTCAGCTTGGCGGCTGCTTCCAGGGCTCCCGAGCCACAGCTGGGCGTG 79
1  GTCCCTGCTGTCAGCTTGGCGGCTGCTTCCAGGGCTCCCGAGCCACAGCTGGGCGTG 60
80  CTGGCTGAGGGAACATGGCATGTTGGCTCAGCTGAGGTTGCTGTGGGAAGAACCTCA 139
61  CTGGCTGAGGGAACATGGCATGTTGGCTCAGCTGAGGTTGCTGTGGGAAGAACCTCA 120
140  CTTTCAGAGAGAGACAAACA 159
121  CTTTCAGAGAGAGACAAACA 140
```

1585 TTCTGCCCAAACTCAGGTCAAACTGTAAGTCTCAAAATGTGAACTTGCCTTCAAGT 1644  
Db  
252 TTCTGCCCAAACTCAGGTCAAACTGTAAGTCTCAAAATGTGAACTTGCCTTCAAGT 311  
Qy  
1645 GGCTACAAAGGATCTTTTCAAGGTAGGAGACCTTGTGGCCCTCCACGTGCACTCCAGG 1704  
Db  
312 GGCTACAAAGGATCTTTTCAAGGTAGGAGACCTTGTGGCCCTCCACGTGCACTCCAGG 371  
Qy  
1705 GCCTGCTTGGCCCTTCTTCAAGGCTGTCTCCTGAGTCTTCTATGAAT---CCTTCAGGCG 1761  
Db  
372 GCCTGCTTGGCCCTTCTTCAAGGCTGTCTCCTGAGTCTTCTATGAATCTCCCTTCAGGCG 430  
Qy  
1762 AGATTTCATATTAGACTCTTCAAGTTGACCTGAGTTTGGCCAGAAAGGTCATTT 1821  
Db  
431 AGATTTCATATTAGACTCTTCAAGTTGACCTGAGTTTGGCCAGAAAGGTCATTT 490  
Qy  
1822 TAGTTTGTGGCTGATGATGACTTAAATATTAGAC-ATGGTGTGAGGCTCGCATTT 1879  
Db  
491 TAGTTTGTGGCTGATGATGACTTAAATATTAGACATATGATGATGATGATGATGAT 550  
Qy  
1880 CCTACTCTGGCTTTTGTGGCCCTTCAAGGCTGTCTCCTGAGTCTTCTATGAAT---CCTTCAGGCG 1938  
Db  
551 CCTACTCTGGCTTTTGTGGCCCTTCAAGGCTGTCTCCTGAGTCTTCTATGAAT---CCTTCAGGCG 610  
Qy  
1939 CCAAGGCAAAACAGAGAGTTGAGGTCTGAGTCTGAGTCTGAGTCTGAGTCTGAGTCTGAGT 1998  
Db  
611 CCAAGGCAAAACAGAGAGTTGAGGTCTGAGTCTGAGTCTGAGTCTGAGTCTGAGTCTGAGT 670  
Qy  
1999 ATCTCTGGCTGCACTCACAAAGTATACAAATTAACAACTCAAGTCTGCTTTTATCAC 2058  
Db  
671 ATCTCTGGCTGCACTCACAAAGTATACAAATTAACAACTCAAGTCTGCTTTTATCAC 730  
Qy  
2059 AGGAGGCTGATCAATATATAAATAAAGGAGGCTGTCT-CAATATTCTTCTGTGTTT 2117  
Db  
731 AGGAGGCTGATCAATATATAAATAAAGGAGGCTGTCT-CAATATTCTTCTGTGTTT 790  
Qy  
2118 TTGTTTGTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTT 2177  
Db  
791 TTGTTTGTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTT 841  
Qy  
2178 TGAAGAGAACTAGTAAGTCTCTCGGCTCTCTGAGTCTGAGTCTGAGTCTGAGTCTGAGTCT 2237  
Db  
842 TGAAGAGAACTAGTAAGTCTCTCGGCTCTCTGAGTCTGAGTCTGAGTCTGAGTCTGAGTCT 901  
Qy  
2238 GGGAAATCTCAAGGAGTGTGCTCTCAAAATCAAAAGTCCAGTCTGAGTCTGAGTCTGAGTCT 2297  
Db  
902 GGGAAATCTCAAGGAGTGTGCTCTCAAAATCAAAAGTCCAGTCTGAGTCTGAGTCTGAGTCT 961  
Qy  
2298 AACAAAGAGAGGCAATACCAAGAGTCTGCTGCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 2357  
Db  
962 AACAAAGAGAGGCAATACCAAGAGTCTGCTGCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1021  
Qy  
2358 TTCAAGGAAACAAAGAGAGCAAAATGATTTGGCTCTGAGGAGATTCAGGCTAGA 2417  
Db  
1022 TTCAAGGAAACAAAGAGAGCAAAATGATTTGGCTCTGAGGAGATTCAGGCTAGA 1081  
Qy  
2418 GCT 2477  
Db  
1082 GCT 1141  
Qy  
2478 CGAAAGAGAGATTTAGAGAGCAAAATTCATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 2537  
Db  
1142 CGAAAGAGAGATTTAGAGAGCAAAATTCATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1201  
Qy  
2538 ACTAGAGAGTCTGCGGCGAGCCCGGAGCCGAGCCGAGCCGAGCCGAGCCGAGCCGAGCCGAG 2597  
Db  
1202 ACTAGAGAGTCTGCGGCGAGCCCGGAGCCGAGCCGAGCCGAGCCGAGCCGAGCCGAGCCGAG 1261  
Qy  
2598 GCGCGGCGAGCCCGGAGCCCGGAGCCCGGAGCCCGGAGCCCGGAGCCCGGAGCCCGGAGCCGAG 2657  
Db  
1262 GCGCGGCGAGCCCGGAGCCCGGAGCCCGGAGCCCGGAGCCCGGAGCCCGGAGCCCGGAGCCGAG 1321  
Qy  
2658 CCCCACCCCAACCCCAACCCCAACCCCAACCCCAACCCCAACCCCAACCCCAACCCCAACCCCAAC 2717

1322 -----CCCCACCCACCCACCTTCCCCGAGTCTCCTAGATGTGTCTGGGGGCTGAACG 1376  
Qy  
2718 TCGCCCGTTTAAAGGCGCGGCGCCCGGCTTCAAGTCTTCTGCTGAGTGAATGAATCA 2777  
Db  
1377 TCGCCCGTTTAAAGGCGCGGCGCCCGGCTTCAAGTCTTCTGCTGAGTGAATGAATCA 1436  
Qy  
2778 TAAACAGAGGCGCGGAGCGGCGCGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 2837  
Db  
1437 TAAACAGAGGCGCGGAGCGGCGCGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1496  
Qy  
2838 CCGTCTGCGCTCGGTGAGCGCAATCTATAAAGGAGTCTAGTCCCGGCAAAATCCCGTAA 2897  
Db  
1497 CCGTCTGCGCTCGGTGAGCGCAATCTATAAAGGAGTCTAGTCCCGGCAAAATCCCGTAA 1556  
Qy  
2898 TTGCGAGGAGGAGTGTGAGTGGGCGCGGAGCGGAGCGGAGCGGAGCGGAGCGGAGCGGAG 2957  
Db  
1557 TTGCGAGGAGGAGTGTGAGTGGGCGCGGAGCGGAGCGGAGCGGAGCGGAGCGGAGCGGAG 1616  
Qy  
2958 GCTGCGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 2984  
Db  
1617 GCTGCGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1643

RESULT 3  
US-09-560-372-1  
; Sequence 1, Application US/09560372  
; Patent No. 6773893  
; GENERAL INFORMATION:  
; APPLICANT: Tell, Alan R.  
; TITLE OF INVENTION: HUMAN ABC1 PROMOTER AND ASSAY BASED THEREON  
; FILE REFERENCE: 61766.app  
; CURRENT APPLICATION NUMBER: US/09/560,372  
; CURRENT FILING DATE: 2001-07-20  
; NUMBER OF SEQ ID NOS: 17  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 1  
; LENGTH: 1197  
; TYPE: DNA  
; ORGANISM: human  
US-09-560-372-1

Query Match 35.1%; Score 1134.8; DB 3; Length 1197;  
Best Local Similarity 98.4%; Pred. No. 7.9e-271; Indels 17; Gaps 4;  
Matches 1193; Conservative 0; Mismatches 2; Indels 17; Gaps 4;

1791 ACCTGAGTTTGGCCAGAAATAGGTGACATTTAGTTTGTGGCTTGTGATGATGACTTAA 1850  
Db 1 ACCTGAGTTTGGCCAGAAATAGGTGACATTTAGTTTGTGGCTTGTGATGATGACTTAA 60  
Qy 1851 TATTTAGAC--ATGGTGTGAGGCTGCAATCTCTTCTGCTTTTGTGCTTTTGTGCTTCTCC 1908  
Db 61 TATTTAGACATATGTTGTGAGGCTGCAATCTCTTCTGCTTTTGTGCTTTTGTGCTTCTCC 120  
Qy 1909 AGTGTGTTGGTGTGTTTGTCTCCCTACAGCCAAAGGAGGAGGAGGAGGAGGAGGAGGAGG 1968  
Db 121 AGTGTGTTGGTGTGTTTGTCTCCCTACAGCCAAAGGAGGAGGAGGAGGAGGAGGAGGAGG 180  
Qy 1969 GAGTGGCTACATAATTTTACAGAGTCTGCAATTTCTGCTGCTGCAATTTTCAAAATGATATA 2028  
Db 181 GAGTGGCTACATAATTTTACAGAGTCTGCAATTTCTGCTGCTGCAATTTTCAAAATGATATA 240  
Qy 2029 AACTAAATCAAGTCTGTGTTTATCAAGGAGGCTGATCAATATATGAAATATAA 2088  
Db 241 AACTAAATCAAGTCTGTGTTTATCAAGGAGGCTGATCAATATATGAAATATAA 300  
Qy 2089 AGGGGCTGCTCCATATTTGTTGTTTGTGTTTGTGTTTGTGTTTGTGTTTGTGTTTGTGTTT 2148  
Db 301 AGGGGCTGCTCCATATTTGTTGTTTGTGTTTGTGTTTGTGTTTGTGTTTGTGTTTGTGTTT 351  
Qy 2149 GTTTTGTGCT 2208  
Db 352 GTTTTGTGCT 411

2209 TCCTCTGAGGAGCTCTGGGAGCTCAGGCTGGGATCTCCAGGAGTAGTGGCTATCA 2268  
412 TCCTCTGAGGAGCTCTGGGAGCTCAGGCTGGGATCTCCAGGAGTAGTGGCTATCA 471  
2269 AAAATCAAGTCCAGGTTTGTGGGGGAAACAAAGCAGCCATTAACCCAGAGGAGTGT 2328  
472 AAAATCAAGTCCAGGTTTGTGGGGGAAACAAAGCAGCCATTAACCCAGAGGAGTGT 531  
2329 CCGCTTCCCTCACCAGCCTAGGCTTTGAAGGAAACAAAGCAGCAAAATGA 2388  
532 CCGCTTCCCTCACCAGCCTAGGCTTTGAAGGAAACAAAGCAGCAAAATGA 591  
2389 TTGGCGCTCTGAGGAGATTCAGCTAGAGTCTCTCTCCCCCAATCCCTCCCTCGGCT 2448  
592 TTGGCGCTCTGAGGAGATTCAGCTAGAGTCTCTCT - CCCCATCCCTCCCTCGGCT 650  
2449 GAGGAACTAACAAAGGAAAGAAATTTGCGGAAAGCAGGATTTAGAGGAGCAAAATTC 2508  
651 GAGGAACTAACAAAGGAAAGAAATTTGCGGAAAGCAGGATTTAGAGGAGCAAAATTC 710  
2509 ACTGGTGGCTTGGCTGCGGAGACGTGGACTAGAGTCTGGGCGCAGCCCGGAGCC 2568  
711 ACTGGTGGCTTGGCTGCGGAGACGTGGACTAGAGTCTGGGCGCAGCCCGGAGCC 770  
2569 AGCGCTTCCCGCGCTCTTAGGCGCGGCGCGCGGCGGAGGAGGAGCGCAGACCGG 2628  
771 AGCGCTTCCCGCGCTCTTAGGCGCGGCGCGCGGCGGAGGAGGAGCGCAGACCGG 830  
2629 GACCTTAAGACACTGTGTACCTCCACCCCAACCCCAACCCCAACCTCCCGGCAAC 2688  
831 GACCTTAAGACACTGTGTACCTCCAC - CCCCACCCCAACCCCAACCTCCCGGCAAC 885  
2689 TCCTAGAGTGTGCTGGGCGGTGACGTGCGCGCTTTAAGGCGGCGCGCGCTCCA 2748  
886 TCCTAGAGTGTGCTGGGCGGTGACGTGCGCGCTTTAAGGCGGCGCGCGCTCCA 945  
2749 CGTGTCTTCTGTGAGTGACTGAATACATAAAGAGAGGCGGAGGCGGCGGAGGA 2808  
946 CGTGTCTTCTGTGAGTGACTGAATACATAAAGAGAGGCGGAGGCGGCGGAGGA 1005  
2809 GGAGAGCAGAGCTTTGACCGATGAACTCTGGCTGGTGGTGGTGGTGGTGGTGGT 2868  
1006 GGAGAGCAGAGCTTTGACCGATGAACTCTGGCTGGTGGTGGTGGTGGTGGTGGT 1065  
2869 AGGAAGTCTCCCGGCAAAACCCCGTAATTCGAGGAGAGTGTGGGCGGAGCC 2928  
1066 AGGAAGTCTCCCGGCAAAACCCCGTAATTCGAGGAGAGTGTGGGCGGAGCC 1125  
2929 GCAGAGCGGAGCGAGCTTCTCTCCCGGCTGCGGAGGAGGCGGAGGAGCTCCGG 2988  
1126 GCAGAGCGGAGCGAGCTTCTCTCCCGGCTGCGGAGGAGGCGGAGGAGCTCCGG 1185  
2989 CACCAACAGAGC 3000  
1186 CACCAACAGAGC 1197

RESULT 4  
US-09-949-016-17196  
Sequence 17196, Application 10/09/949016  
Patent No. 6812339  
GENERAL INFORMATION:  
APPLICANT: VENTER, J. Craig et al.  
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED  
WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF  
FIVE REFERENCE: CL001307  
CURRENT APPLICATION NUMBER: US/09/949,016  
CURRENT FILING DATE: 2000-04-14  
PRIORITY FILING DATE: 2000-04-14  
PRIORITY FILING DATE: 2000-10-20  
PRIORITY FILING DATE: 2000-10-20  
PRIORITY FILING DATE: 2000-10-20

PRIOR APPLICATION NUMBER: 60/231,498  
PRIOR FILING DATE: 2000-09-08  
NUMBER OF SEQ ID NOS: 207012  
SOFTWARE: FASTSEQ for Windows Version 4.0  
SEQ ID NO 17196  
LENGTH: 118143  
TYPE: DNA  
ORGANISM: Human  
US-09-949-016-17196

Query Match 10.8%; Score 347.4; DB 3; Length 118143;  
Best Local Similarity 65.3%; Pred. No. 5.4e-75;  
Matches 596; Conservative 0; Mismatches 296; Indels 21; Gaps 5;

362 ACATGAAGAAACAGCGCGGCAATGGCTAATGCTTAATCCAGCACTTTGGGAGGC 421  
80047 AAAATATGTCATAGGCTGGGCAATGGTGGTCTATGCTGTAATCCAGCACTTTGGGAGGC 80106  
422 TGAGGCCAGAGGATCGCTTGAGCTCCAGAGTTTGAGCCAGGCTTGATTAACATGGCAAAA 481  
80107 CAGCGCGGCGAGTTGCTTGAGCCAGGAGTTGAGAGCCAGGCTGAGCAATGTGGTGA 80166  
482 CCCTGTCTCTCAAAAAAATAACAAAAATAGATCGGTGTGGTCATGCACTGTGGTC 541  
80167 CCCTGTCTCTAC - TAAAAATATGAAAAATTAGCCAGGAGTGGTGTGGCTATGGTC 80224  
542 CCAGCTACTTGGGAGGCTAAGGTGGAGCTTCGCTTGAGCCAGGAGTCAAGTCTACAC 601  
80225 CAGCTACTTGGAGGTTGAGGTGAGAGGATCATTGAGCCCTGGGAGTTCAAGGCTG 80284  
602 TGAGCCATGATTTGATCCTGACCTCCAGCCTGGGTGAGAGAGCAAGACCTGTCTCAA 661  
80285 TGAGCCATGATTTGAGCTCCAGCTCCAGCTTCCAGCTTCCAGCTTCCAGCTTCAA 80343  
662 AAAGAGAAATGAAGAGAAAGAAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 721  
80344 AACAAATAAATAAATATATAATATATATATATATATATATATATATATATATATAT 80403  
722 AGGGGGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 781  
80404 AACATGATACAGGCTTTTATGAGGAGTGTAGTGTG - AAATGATATGATCTG 80458  
782 ATGAAACAGAGCAGAGCAAGGAGCTTACGTAATTTGCTCATGTTGTCAAGTTTAC 841  
80459 GAGTCAATATATGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTG 80518  
842 CCAAAACCCATTTATTTGACCAAGGTTATTTTGTGATGAGTGTGAGTGTGAGTGTG 901  
80519 CATGTTAGTGTACAGAAACAAATGAGATATTTAT - ATGTTAAACCTTAGTTGAC 80573  
902 CTGGGCTTTGGGCTTTAGAAAGCTCATCTCTGGGCTTTCTGAGATCATCTCCCTTTCTTT 961  
80574 TGGTACCACCAACCAATCATAGTCCCTAGTGGTGTGCAATTTGATTTATTTTGT 80633  
962 TATTTTGTGACACGAGTCTTGTCTGTCTCACTCAGGCTGAGTGTGAGTGTGAGTGTG 1021  
80634 TGTGTTTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGT 80693  
1022 CGACTCACTGTAACCTCTGCTTCCCGGCTTCCAGGATTTCTCTCCCTCAGCTC - 1076  
80694 CGGCTCACTGCAACCTCTGCTTCCCTGAGTCAAGGATTTCTCTCTCAGCTTCCCAAG 80753  
1077 ---CTGAGATTAACAGCG 1133  
80754 TAGCTGGGATTTACAGGAAACACACACCAACCGCGCGCGCGCGCGCGCGCGCGCGCG 80813  
1134 CTGGGTTTCACTCATGTTGGCGAGGTTGTTTTCGAACTCTGACCTGAGTGTGAGTGTG 1193  
80814 CGGGGTTTCACTCATGTTGGCGAGGTTGTTTTCGAACTCTGACCTCTGACCTCAGTGT 80873  
1194 CTTGGCTTCCCAAGTCTGGGATTAAGGATGAGGATGAGGATGAGGATGAGGATGAGGAT 1253  
80874 CTTGAGCTTCCCAAGTCTGGGATTAAGGATGAGGATGAGGATGAGGATGAGGATGAGGAT 80913

Db 1437 TAAACAGAGCGCGGAAACGGGGCGGAGGAGGAGAGCAAGGCTTTGACCGCATAGTAA 1496  
Qy 2838 CTTCTGGCGTGGGTGACGCGCAATCTATAAGAGGAACCTAGTCCAGGCAAAACCC 2893  
Db 1497 CCTCTGGCGTGGGTGACGCGCAATCTATAAGAGGAACCTAGTCCAGGCAAAACCC 1552

RESULT 3  
US-09-560-372-1  
; Sequence 1, Application US/09560372  
; Patent No. 6773893  
; GENERAL INFORMATION:  
; APPLICANT: Tall, Alan R.  
; TITLE OF INVENTION: HUMAN ABC1 PROMOTER AND ASSAY BASED THEREON  
; FILE REFERENCE: 61766.app  
; CURRENT APPLICATION NUMBER: US/09/560,372  
; CURRENT FILING DATE: 2001/07/20 4/28/2000  
; NUMBER OF SEQ ID NOS: 17  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 1  
; LENGTH: 1197.  
; TYPE: DNA  
; ORGANISM: human  
; US-09-560-372-1

Query Match 35.5%; Score 1027.8; DB 3; Length 1197;  
Best Local Similarity 98.3%; Pred. No. 6.3e-241;  
Matches 1086, Conservative 0; Mismatches 56; Gaps 4;  
1791 ACTGAGTTTGGCCAGATAAGGTGACATTTAGTTTGTGGCTGATCATGACTTAA 1850  
1 ACCTGAGTTTGGCCAGATAAGGTGACATTTAGTTTGTGGCTGATCATGACTTAA 60  
1851 TATTAGAC--ATGGTGTGTAGCCGTGCATCTCTCTGTGCTTTTTTTTGGCCCTCC 1908  
61 TATTAGACATATGGTGTGTAGCCCTGCATCTCTCTGTGCTTTTTTTTGGCCCTCC 120  
1909 AGTGTTTTGGGTAGTTTTCCTCCCTACAGCCATAGGCAACAGAGATTTTCGAGGTCTG 1968  
121 AGTGTTTTGGGTAGTTTTCCTCCCTACAGCCATAGGCAACAGAGATTTTCGAGGTCTG 180  
1969 GAGTGCTACATAATTTTACAGCTGCAATTTCTGCTGCACTTCAAAATGATATACA 2028  
181 GAGTGCTACATAATTTTACAGCTGCAATTTCTGCTGCACTTCAAAATGATATACA 240  
2029 AACTAAATACAGTCTCTGTTTATCACAGGAGGCTGATCAATATAATGAATATAA 2088  
241 AACTAAATACAGTCTCTGTTTATCACAGGAGGCTGATCAATATAATGAATATAA 300  
2089 AGGGGCTGGTCCATATTTGTTCTGTGTTTGTGTTTGTGTTTGTGTTTGTGTTTGT 2148  
301 AGGGGCTGGTCCATATTTGTTCTGTGTTTGTGTTTGTGTTTGTGTTTGTGTTTGT 351  
2149 GTTTTGTGGCTCTCTTCTCTCAATTTATGAAGAGAGCAAGTAAAGATGTTCTCTCGG 2208  
352 GTTTTGTGGCTCTCTTCTCTCAATTTATGAAGAGAGCAAGTAAAGATGTTCTCTCGG 411  
2209 TCCTCTGAGGACCTGGGGAGCTCAGGCTGGGATCTTCAAGGAGGTAGGTGCGCTATCA 2268  
412 TCCTCTGAGGACCTGGGGAGCTCAGGCTGGGATCTTCAAGGAGGTAGGTGCGCTATCA 471  
2269 AAAATCAAAGTCCAGGTTTGTGGGGGAAACAAAGCAGCCATTACCCAGAGGACTGT 2328  
472 AAAATCAAAGTCCAGGTTTGTGGGGGAAACAAAGCAGCCATTACCCAGAGGACTGT 531  
2329 CGGCTTTCCCTTACCCAGGCTTAGGCTTTGAAAGGAAACAAAGACAAAGCAAAATGA 2388  
532 CGGCTTTCCCTTACCCAGGCTTAGGCTTTGAAAGGAAACAAAGACAAAGCAAAATGA 591  
2389 TTGGCTGCTGAGGAGATTCAGCTTAGGCTCTCTCTCCCTTCCCTCCCTCCGCT 2448  
592 TTGGCTGCTGAGGAGATTCAGCTTAGGCTCTCTCTCCCTTCCCTCCCTCCGCT 2448

2449 GAGGAACTAACAAAGGAAAAAATTCGGGAAAGCAGATTATAGAGGAAACAAATCC 2508  
 651 GAGGAACTAACAAAGGAAAAAATTCGGGAAAGCAGATTATAGAGGAAACAAATCC 710  
 2509 ACTGGTGGCTTGGCTGGCGGAAAGCTGACCTAGAGAGTCTGGGCGCAGCCCGAGGCC 2568  
 711 ACTGGTGGCTTGGCTGGCGGAAAGCTGACCTAGAGAGTCTGGGCGCAGCCCGAGGCC 770  
 2569 AGCGCTTCCCGGCGCTTCTAGGCGCGGCGCGCGCGGCGGCGGCGGCGGCGGCGGCGG 2628  
 771 AGCGCTTCCCGGCGCTTCTAGGCGCGGCGCGCGCGGCGGCGGCGGCGGCGGCGGCGG 830  
 2629 GACCTTAAGACACTGCTGACCTTCCACCCCAACCCCAACCCCAACCCCAACCCCAAC 2688  
 831 GACCTTAAGACACTGCTGACCTTCCACCCCAACCCCAACCCCAACCCCAACCCCAAC 885  
 2689 TCCCTAGATGCTGCTGGGCGGCTGAACTGCGCCGCTTCTAGGCGCGGCGGCGGCGGCGG 2748  
 886 TCCCTAGATGCTGCTGGGCGGCTGAACTGCGCCGCTTCTAGGCGCGGCGGCGGCGGCGG 945  
 2749 CCGCTTCTGCTGAGTGAAGTCAATACATAAAGAGGCGCGGCGGCGGCGGCGGCGGCGG 2808  
 946 CCGCTTCTGCTGAGTGAAGTCAATACATAAAGAGGCGCGGCGGCGGCGGCGGCGGCGG 1005  
 2809 GGGAGACACAGGCTTGAACCATGATTAACCTGCGCTGCGTGACGCGCAATCTATAAA 2868  
 1006 GGGAGACACAGGCTTGAACCATGATTAACCTGCGCTGCGTGACGCGCAATCTATAAA 1065  
 2869 AGGACTAGTCCGGGCAAAACCCC 2893  
 1066 AGGACTAGTCCGGGCAAAACCCC 1090

RESULT 4  
 US-09-949-016-17196  
 ; Sequence 17196, Application US/09949016  
 ; Patent No. 6812339  
 ; GENERAL INFORMATION:  
 ; APPLICANT: VENTER, J. Craig et al.  
 ; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED  
 ; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF  
 ; FILE REFERENCE: CL001307  
 ; CURRENT APPLICATION NUMBER: US/09/949,016  
 ; CURRENT FILING DATE: 2000-04-14  
 ; PRIOR APPLICATION NUMBER: 60/241,755  
 ; PRIOR FILING DATE: 2000-10-20  
 ; PRIOR APPLICATION NUMBER: 60/237,768  
 ; PRIOR FILING DATE: 2000-10-03  
 ; PRIOR APPLICATION NUMBER: 60/231,498  
 ; PRIOR FILING DATE: 2000-09-08  
 ; NUMBER OF SEQ ID NOS: 2/7012  
 ; SOFTWARE: FastSeq for Windows Version 4.0  
 ; SEQ ID NO 17196  
 ; LENGTH: 118143  
 ; TYPE: DNA  
 ; ORGANISM: Human  
 ; US-09-949-016-17196

Query Match 12.0%; Score 347.4; DB 3; Length 118143;  
 Best Local Similarity 65.3%; Prob. No. 5.5e-74; Indels 21; Gaps 5;  
 Matches 596; Conservative 0; Mismatches 296;  
 362 AGATGAGAAACAGGCGGCGGCAATGGCTTAATGCTGTAATCCAGCAGCTTTGGAGGC 421  
 80047 AAAATATGCAATAGGCTGGGCGATGGTGTCTATGCTGTATATCCAGCAGCTTTGGAGGC 80106  
 422 TGAGGCGCAGGATGCTTGAAGTTCAGATTTGAGACCACTCTGATTAACCTGATTAACCTG 481  
 80107 CACGAGCGGCAATGCTTGGAGCCAGGATTCGAGACCACTCTGATTAACCTGATTAACCTG 80166  
 482 CCTGTCTCTACAAAAAATACAAAAATAGATGGTGTGGTGGCATGCACTGCTGCTGCTGCTG 541

Db 80167 CCCGTCTCTAC--TAAATATGAAATTAGCCAGAGTGGTGGTGGCCCTATGCTC 80224  
 Qy 542 CCAGCTACTTTGGGAGGCTAAGGTGGAGGATCGCTTGAGCCCGAGGAGTCAAGTCTACAC 601  
 Db 80225 CCAGCTACTTTGAGAGGTTGAGGTGAGAGGATCACTTGAGCCCTGGGAGTTCAGGCTGCGAG 80284  
 Qy 502 TGAGCCATGATTTGATCACTGCTCCAGCTGGGTGAGACAGCAAGACCTGCTCTCAA 661  
 Db 80285 TGAGCCAGGATTTGGCCCACTGCACTCCAGCCCTAGGCA-ACAGAACAGCCCTGCTCAA 80343  
 Qy 662 AAAATAGAAATGAAAGAGAAAGAAAGAGAGGAGAGAGAGAGAGAGAGAGAGAGAG 721  
 Db 80344 AACAAATAAAT 80403  
 Qy 722 AGGGGGGAG 781  
 Db 80404 AACATAGATACAGAGTCTTTTAAATAGGGTAGTCTG-----AAATGTACTTGTATCTG 80458  
 Qy 782 ATGAAACAGAGCGCAGAAAGACTTTTACGTAATTTCTCATCATGTTGTTGTTCAAGTTTGCAC 841  
 Db 80459 GAGATCAATATACCTGTAATGCTGGAATCTGGAATGCGGAATGCTTTGCAATTTTCTC 80518  
 Qy 842 CCCAAACCCCAATTAATGACCAAGTTTATTTCTTGAAGTGGGAGAGAGAGAGAGAGAG 901  
 Db 80519 CATGTTAGTTTAAAGAAACATGAGATAATTTTAT-----ATGGTAAACCTTAGTTGAC 80573  
 Qy 902 CTGGGCGCTTGGCTTTTAAAGAGCTCATCTCTGGGCTTTCTGAGATCCATCCCTTTCTTTT 961  
 Db 80574 TGSTACCCCAACAAATCATAGTCCCTAGTGGGCTGCAATGATTAATTTTCTTTTCT 80633  
 Qy 962 TATTTTCTTGACACGGAGTCTTCTGTCATCACTGCTGAGTGGAGTGGCATGATCT 1021  
 Db 80634 TGTGTGTTTGAAGAGGAGGCTTGTCTGTTGTCAGGCTGAGTGGAGTGGCGCAATCT 80693  
 Qy 1022 CGACTCATGTAACTGCGCTCCCGGCTTCAAGCGTCTCTGCTGCTGCTGCTGCTGCTGCTGCT 1076  
 Db 80694 CGGCTCATGTCAGCTCTGCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 80753  
 Qy 1077 ---CTGAGATAACAGGCGCGCCGCCACACATCTGCTAATTTTGTATTTTGTATTAAGA 1133  
 Db 80754 TAGCTGGGATTTACAGGAACACACACCCAGCCCTAGCTAATTTTGTATTTTGTATTAAGA 80813  
 Qy 1134 CTGGGTTTCATCANGTTGGCCAGGTTGGTTTGAACCTGCACTGAGTGGAGTGGCGCCA 1193  
 Db 80814 CGGGGTTTCCACCATGTTGGCCAGGCTAGTCTGGAATCTGCACTGAGTGGAGTGGCGCCA 80873  
 Qy 1194 CTTTGGCTCCCAAGTGTGGGATTAAGGATGAGGCTGAGGCTGAGGCTGAGGCTGAGGCTGAG 1253  
 Db 80874 CTTGAGCTCCCAAGTGTGGGATTAAGGATGAGGCTGAGGCTGAGGCTGAGGCTGAGGCT 80933  
 Qy 1254 TCCCTTTCTAAGG 1266  
 Db 80934 CTAATTTTAAAG 80946

RESULT 5  
 US-09-949-016-13690/c  
 ; Sequence 13690, Application US/09949016  
 ; Patent No. 6812339  
 ; GENERAL INFORMATION:  
 ; APPLICANT: VENTER, J. Craig et al.  
 ; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED  
 ; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF  
 ; FILE REFERENCE: CL001307  
 ; CURRENT APPLICATION NUMBER: US/09/949,016  
 ; CURRENT FILING DATE: 2000-04-14  
 ; PRIOR APPLICATION NUMBER: 60/241,755  
 ; PRIOR FILING DATE: 2000-10-20  
 ; PRIOR APPLICATION NUMBER: 60/237,768  
 ; PRIOR FILING DATE: 2000-10-03  
 ; PRIOR APPLICATION NUMBER: 60/231,498  
 ; PRIOR FILING DATE: 2000-09-08  
 ; NUMBER OF SEQ ID NOS: 207012